



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,759	05/31/2000	Hiroyuki Kawano	046601-5043	4131

9629 7590 12/19/2003
MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

LAMB, TWYLER MARIE

ART UNIT	PAPER NUMBER
----------	--------------

2622

DATE MAILED: 12/19/2003

h

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/583,759

Applicant(s)

KAWANO ET AL.

Examiner

Twyler M. Lamb

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Sugaya (US 6,304,446).

With regard to claim 1, Tsunekawa discloses an image processing apparatus (Figure 1) comprising: an input part (interface 608) that inputs a page description language composed of an image-forming command (col 9, lines 16-25); an analyzing

Art Unit: 2622

part that predicts an image upon printing by analyzing a content of the page description language inputted by the input part (col 10, lines 31-47); and a rewriting part that rewrites the content of the inputted page description language according to the prediction by the analyzing unit (col 9, line 57 – col 10, line 10).

4. Claims 3-4, 8-9, 11-12 and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsunekawa et al. (Tsunekawa) (US 6,348,975).

With regard to claim 3, Sugaya discloses an image processing apparatus (Figure 2) comprising: an input part (input portion 1-5) that inputs a page description language composed of an image-forming command (col 7, lines 53-55); an analyzing part that predicts whether image deterioration will occur or not upon printing by analyzing a content of the page description language inputted by the input part (col 11, line 63 – col 12, line 28); an image-forming part that forms a raster image according to the content of the page description language inputted by the input part (col 12, line 29 – col 13, line 5); and a compensation processing part that performs, according to the prediction by the analyzing part, compensation processing on the raster image formed by the image-forming part for reducing image deterioration upon printing (col 12, line 29 – col 13, line 5).

With regard to claim 4, Sugaya discloses an image processing apparatus (Figure 2) comprising: an input part (input portion 1-5) that inputs a page description language composed of an image-forming command (col 7, lines 53-55); an analyzing part that predicts whether image deterioration will occur or not upon printing by analyzing a

Art Unit: 2622

content of the page description language inputted by the input part (col 11, line 63 – col 12, line 28); an image-forming part that forms a raster image according to the content of the page description language inputted by the input part (col 12, line 29 – col 13, line 5); and an information adding part that adds, according the prediction by the analyzing part, additional information showing at least whether the image deterioration will occur or not upon printing in the raster image formed by the image-forming part according to the page description language inputted by the input part (col 12, line 29 – col 13, line 5).

With regard to claim 8, Sugaya also discloses wherein the compensation processing part determines whether the compensation processing is performed or not based upon an instruction from a user (col 11, line 63 – col 12, line 28).

With regard to claim 9, Sugaya also discloses wherein the information adding part determines whether the additional information is added or not based upon an instruction from a user (col 12, line 29 – col 13, line 5).

With regard to claim 11, Sugaya also discloses wherein the compensation processing part determines whether the compensation processing is performed or not based upon a print mode designated by a user (col 11, line 63 – col 12, line 28).

With regard to claim 12, Sugaya also discloses wherein the information adding part determines whether the additional information is added or not based upon a print mode designated by a user (col 12, line 29 – col 13, line 5).

With regard to claim 14, Sugaya also discloses wherein the compensation processing part determines whether compensation processing is performed or not

Art Unit: 2622

based upon a kind of application software that has output the page description language to the input part (col 11, line 63 – col 12, line 28).

With regard to claim 15, Sugaya also discloses wherein the information adding part determines whether the additional information is added or not based upon a kind of application software that has output the page description language to the input part (col 11, line 63 – col 12, line 28).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 5-7, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunekawa et al. (Tsunekawa) (US 6,348,975) in view of Sugaya (6,304,336).

With regard to claim 2, Tsunekawa does not specifically teach wherein the analyzing part predicts whether image deterioration will occur or not upon printing, and the rewriting part rewrites the content of the page description language in case where the analyzing unit predicts that the image deterioration will occur.

Art Unit: 2622

Sugaya discloses an output control device that includes wherein the analyzing part predicts whether image deterioration will occur or not upon printing, and the rewriting part rewrites the content of the page description language in case where the analyzing unit predicts that the image deterioration will occur (col 11, line 63 – col 12, line 28).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Tsunekawa to include wherein the analyzing part predicts whether image deterioration will occur or not upon printing, and the rewriting part rewrites the content of the page description language in case where the analyzing unit predicts that the image deterioration will occur as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Tsunekawa by the teaching of Sugaya so the coded and registered data matches as taught by Sugaya in col 11, line 63 – col 12, line 28.

With regard to claim 5, Tsunekawa does not specifically teach wherein the analyzing part predicts that the image deterioration will occur upon printing when a difference between densities of two adjacent areas is larger than a predetermined threshold value.

Sugaya discloses an output control device that includes wherein the analyzing part predicts that the image deterioration will occur upon printing when a difference between densities of two adjacent areas is larger than a predetermined threshold value (col 11, line 63 – col 12, line 28).

Art Unit: 2622

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Tsunekawa to include wherein the analyzing part predicts that the image deterioration will occur upon printing when a difference between densities of two adjacent areas is larger than a predetermined threshold value as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Tsunekawa by the teaching of Sugaya so the coded and registered data matches as taught by Sugaya in col 11, line 63 – col 12, line 28.

With regard to claim 6, Tsunekawa does not specifically teach wherein the analyzing part predicts that the image deterioration occurs upon printing when a distance between each boundary of two adjacent areas is more than a predetermined threshold value.

Sugaya discloses an output control device that includes wherein the analyzing part predicts that the image deterioration occurs upon printing when a distance between each boundary of two adjacent areas is more than a predetermined threshold value (col 11, line 63 – col 12, line 28).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Tsunekawa to include wherein the analyzing part predicts that the image deterioration occurs upon printing when a distance between each boundary of two adjacent areas is more than a predetermined threshold value as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Tsunekawa by the teaching of Sugaya so

Art Unit: 2622

the coded and registered data matches as taught by Sugaya in col 11, line 63 – col 12, line 28.

With regard to claim 7, Tsunekawa does not specifically teach wherein the rewriting part determines whether the rewriting of the page description language is performed or not based upon an instruction from a user.

Sugaya discloses an output control device that includes wherein the rewriting part determines whether the rewriting of the page description language is performed or not based upon an instruction from a user (col 11, line 63 – col 12, line 28).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Tsunekawa to include wherein the rewriting part determines whether the rewriting of the page description language is performed or not based upon an instruction from a user as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Tsunekawa by the teaching of Sugaya so the coded and registered data matches as taught by Sugaya in col 11, line 63 – col 12, line 28.

With regard to claim 10, Tsunekawa does not specifically teach wherein the rewriting part determines whether the rewriting of the page description language is performed or not based upon a print mode designated by a user.

Sugaya discloses an output control device that includes wherein the rewriting part determines whether the rewriting of the page description language is performed or not based upon a print mode designated by a user (col 11, line 63 – col 12, line 28).

Art Unit: 2622

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Tsunekawa to include wherein the rewriting part determines whether the rewriting of the page description language is performed or not based upon a print mode designated by a user as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Tsunekawa by the teaching of Sugaya so the coded and registered data matches as taught by Sugaya in col 11, line 63 – col 12, line 28.

With regard to claim 13, Tsunekawa does not specifically teach wherein the rewriting part determines whether rewriting of the page description language is performed or not based upon a kind of application software that has output the page description language to the input part.

Sugaya discloses an output control device that includes wherein the rewriting part determines whether rewriting of the page description language is performed or not based upon a kind of application software that has output the page description language to the input part (col 11, line 63 – col 12, line 28).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Tsunekawa to include wherein the rewriting part determines whether rewriting of the page description language is performed or not based upon a kind of application software that has output the page description language to the input part as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Tsunekawa by the

Art Unit: 2622

teaching of Sugaya so the coded and registered data matches as taught by Sugaya in col 11, line 63 – col 12, line 28.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler Lamb whose telephone number is 703 - 308-8823. The examiner can normally be reached on M-TH (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-308-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 872-9314

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

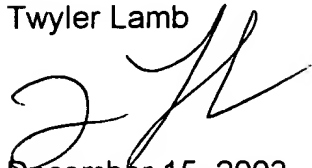
Crystal Park Two
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

Application/Control Number: 09/583,759

Page 11

Art Unit: 2622

Twyler Lamb

A handwritten signature in black ink, appearing to be 'Twyler Lamb', written over the printed name.

December 15, 2003